WHAT IS CLAIMED IS:

1. A semiconductor laser device comprising:

a semiconductor laser having emitting surface which emits laser light along a fast and slow axis; and

a reflection means for reflecting light emitted from the emitting surface of the semiconductor laser and within a range of a predetermined angle in the direction of the slow axis to the semiconductor laser, said reflecting means tilted at a tilt angle along the slow axis from a normal to the emitting surface of the semiconductor laser.

2. A semiconductor laser device according to claim 1, wherein the reflection means comprises a plane mirror.

3. A semiconductor laser device according to claim 1, wherein the reflection means comprises one of a concave mirror or a convex mirror.

4. A semiconductor laser device according to claim 1, further comprising an optical means positioned between the emitting surface of the semiconductor and the reflecting means for controlling the divergence of the light emitted from the emitting surface of the semiconductor laser in the direction of the fast axis.

5. A semiconductor laser device according to claim 1, wherein the semiconductor laser comprises a single-stripe multimode oscillation semiconductor laser.

6. A fiber laser according to claim 1, comprising:

a light collecting means to collect the laser light emitted from the semiconductor laser, whose light intensity is amplified by external resonance by the reflection means; and

an optical fiber on which the light collected by the light collecting means is incident.

7. A method for controlling a semiconductor laser, comprising the steps of:

controlling the divergence of light emitted from the semiconductor laser in the direction of the fast axis; and

returning light emitted within a range of a predetermined angle in the direction of the slow axis, among the controlled light, to the semiconductor laser by utilizing a reflecting device without utilizing a focusing lens between the semiconductor laser and the reflecting device.

8. A method for controlling a semiconductor laser, according to claim 7, further comprising the step of collecting the laser light emitted from the semiconductor laser to make it incident on an optical fiber, of which light intensity is amplified by external resonance by returning the light from the reflecting device to the semiconductor laser screen.

9. An image display device comprising:

a semiconductor laser device emitting laser light and including a reflection device to return the laser light emitted within a range of a predetermined angle in the direction of the slow axis, among the laser light emitted from the semiconductor laser, to the semiconductor laser so as to amplify the laser light by external resonance;

an optical fiber excited by the incidence of the light emitted from the semiconductor laser device;

a modulation means to space-modulate the light excited by the optical fiber in accordance with an image signal; and

a display unit to project and display optical light obtained from the modulation device.

10. An image display device according to claim 9, wherein the semiconductor laser device, the optical fiber, and the modulation device are provided for each of the colors red, green and blue; and

wherein the display unit composes the optical light from each of the red, green and blue modulation devices and projects same on a screen of the display device.

11. An image display device according to claim 9, wherein the semiconductor laser device and the optical fiber are provided for each of the colors red, green and blue; and

wherein the modulation devices space-modulates white light in which the optical light from each optical fiber corresponding to thered, green and blue light is collected.

12. A projection TV receiver comprising:

a tuner for tuning a received TV signal;

a signal processor for demodulating an image signal from the TV signal tuned by the tuner;

a semiconductor laser device including a reflection device to return light emitted within a range of a predetermined angle in the direction of the slow axis, among light emitted from the semiconductor laser, to the semiconductor laser;

an optical fiber excited by the incidence of the light emitted from the semiconductor laser device;

a modulation device to space-modulate the light excited by the optical fiber in accordance with an image signal output from the signal processor; and

a display unit to project and display optical light obtained from the modulation device on a display screen.

13. A semiconductor laser device for emitting laser light by external resonance of a semiconductor laser, comprising:

a semiconductor laser of a multimode oscillation type for emitting light at a divergence angle $\theta x$ about the optical axis (z) from a light emitting area in the direction of the slow axis (x); and

a reflecting mirror of which the reflection plane is inclined substantially at an angle $\theta x$ with respect to the slow axis (x) so that light emitted from the emitting area of the semiconductor laser is incident on the reflection plane perpendicularly thereto, for reflecting the light emitted from the semiconductor laser to feed back the reflected light to the semiconductor laser, thereby promoting the external resonance of the semiconductor laser.

14. The semiconductor laser device as recited in claim 13 wherein a fast axis collimator is disposed between said emitting area of the semiconductor laser and the reflecting mirror and without utilizing a focusing mirror between said collimator and said reflecting mirror.

15.. A semiconductor laser device for emitting laser light by external resonance;

a reflecting mirror having a reflection plan inclined substantially at an angle θx with respect to a slow axis (x) of the semiconductor laser so that the laser light is incident on the reflection plane perpendicularly thereto; and

a semiconductor laser of a multimode oscillation type for emitting light at a divergence angle θx about an optical axis (z)from a light emitting area in the direction of the slow axis (x), on which the light reflected by the reflecting mirror is incident, and emitting light resonant with the incident light by external resonance;

a collecting lens for collecting the resonant light emitted from the semiconductor laser; and

an optical fiber on which the light collected by the collecting lens is incident for performing up-conversion to emit visible light.

16. An image display device using a semiconductor laser device for emitting laser light by external resonance of the semiconductor laser, comprising:

a first reflecting mirror having a reflection plane inclined substantially at an angle θx1 with respect to a slow axis of the semiconductor laser so as to achieve resonance of the semiconductor laser, comprising:

a first semiconductor laser of a multimode oscillation type for emitting light within a divergence angle θx1 about an optical axis (z) from a light emitting area in the direction of the slow axis (x), on which the light reflected by the first reflecting mirror is incident, and emitting first light resonant with the light by external resonance;

a first collecting lens for collecting the first resonant light emitted from the first semiconductor laser; and

a first optical fiber on which the light collected by the first collecting lens is incident for performing first up-conversion to emit first visible light;

a second reflecting mirror having a reflection plane inclined substantially at an angle θx2 with respect to a slow axis of the semiconductor laser so that second laser light is incident on the reflection plane perpendicularly thereto;

a second semiconductor laser of a multimode oscillation type for emitting light within a divergence angle θx2 about an optical axis (z) from a light emitting area in the direction of the slow axis (x), on which the light reflected by the second reflecting mirror is incident, and emitting second light resonant with the light by external resonance;

a second collecting lens for collecting the second resonant light emitted from

the second semiconductor laser;

a second optical fiber on which the light collected by the second collecting lens is incident for performing second up-conversion to emit second visible light;

a third reflecting mirror having a reflection plane inclined substantially at an angle θx3 with respect to a slow axis of the semiconductor laser so that third laser light is incident on the reflection plane perpendicularly thereto;

a third semiconductor laser of a multimode oscillation type for emitting light within a divergence angle θx3 about an optical axis (z) from a light emitting area in the direction of the slow axis (x), on which the light reflected by the third reflecting mirror is incident, and emitting third light resonant with the light by external resonance;

a third collecting lens for collecting the third resonant light emitted from the third semiconductor laser;

a third optical fiber on which the light collected by the third collecting lens is incident for performing third up-conversion to emit third visible light; and

a dichroic prism for composing the first visible light, the second visible light, and the third visible light to generate white light.